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EXAMINER

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ELECTRONIC

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-5, 7-9, and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatter (US 3,016,261) herein referred to as '261, in view of GB 2080407 herein referred to as '407 and further in view of Lambert (US 5,775,028) herein referred to as '028.

4. For Claim 1, '261 discloses a pantographic hinge device comprising: a housing module (Fig. 9: 38) having two end regions; rotatable shaft sections (25, 27) projecting from two end regions of said housing module; a coupling mechanism module (29) configured to create a rotational coupling of the rotatable shaft sections (25, 27) to one another, wherein the coupling mechanism module (29) comprises two gears coupled by a chain.

5. '261 is silent as to the coupling mechanism being separate from the housing module and inserted into an open side of the housing. '407 teaches a hinge housing having an open side configured for insertion of a separate coupling mechanism. It would have been obvious to apply the open housing capable of receiving the separate coupling mechanism of '407 to the hinge of '261 in order to allow for easier installation and manufacturing.

6. '261 does not teach wherein the coupling mechanism module comprises two pulleys coupled by a pulley belt, but instead teaches two gears coupled by a chain. '028 teaches a hinge having either a sprocket or pulley connected by a belt or chain (Column 7, Line 66- Column 8, Line 14). '028 shows that pulleys and a belt are an equivalent structure known in the art. Therefore, because these two drive means were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the belt and pulley drive means of '028 for the chain and gear drive means of '261.

7. For Claim 2, '261 discloses the hinge device according to claim 1, wherein the two shaft sections coaxially project on opposite sides of the housing module at each end of the arm (as seen in Fig. 9).

8. For Claim 3, '261 discloses the hinge device according to claim 1, wherein the shaft sections (25, 27) are connected to the coupling mechanism module (29) by a groove (Fig. 8: 33) and tongue (Fig. 8: 32) arrangement fixed against rotation.

9. For Claim 4, '261 does not teach the arm according to claim 3, wherein the groove and tongue are secured by a pin traversing both. Examiner takes official notice

that it is old and well known to use a pin as a means to secure two objects. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have applied a pin connection to the tongue and groove of '261 in order to further secure it.

10. Examiner's assertion of official notice from the Office Action Mailed 6/25/2008 with regards to using a pin as a means to secure two objects is now taken to be admitted prior art due to Applicant's failure to traverse said official notice (see MPEP § 2144.03).

11. For Claim 5, '261 as modified by '407 and '028 teaches the hinge device according to claim 1, wherein each pulley is configured for a direct connection to one of the shaft sections (as seen in Figures 7-10, the gear members are connected to the shaft members).

12. For Claims 7 and 8, '261 does not teach the arm according to claim 1, wherein a rear panel of the coupling mechanism module at least partially covers the open side or further comprising a cap part configured to fit over the open side and surfaces of the housing module and cover the open side. '407 teaches the open side of the housing as disclosed in claim 1. '261 teaches the housing as a whole piece which covers the coupling mechanism. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to make the whole piece which covers the coupling mechanism as a pair of pieces, one of which as taught in '407 has an open side to allow for insertion of a separate coupling mechanism and a second piece which would cover the coupling mechanism to protect it from dust and damage such as to

maintain the integrity of the housing as is originally disclosed by '261, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *See MPEP 2144.04*

13. For Claim 9, '261 as modified by '407 and '028 teaches a motor vehicle, comprising: a door of the motor vehicle (Fig. 1: 15), a body of the motor vehicle (Fig. 1: 11); and an arm for a pantographic hinge device as described above in the rejections of claims 1-8. '261 further teaches wherein the two pulleys are each configured to be coupled to at least one of the rotatable shaft sections (as seen in Fig. 10) and wherein the rotatable shaft sections comprise a first set and a second set of rotatable shaft sections projecting from the two end regions of said housing module (as seen in Figs. 7 and 8).

14. For Claim 12, '261 teaches the hinge device of claim 1 wherein the pantographic hinge device is configured for coupling a vehicle door to a vehicle frame (as seen in Fig. 1).

15. For Claim 13, '261 teaches the hinge device of claim 12 wherein the two pulleys are each configured to be coupled to at least one of the rotatable shaft sections (as seen in Fig. 10) and wherein the rotatable shaft sections comprise a first set and a second set of rotatable shaft sections projecting from the two end regions of said housing module (as seen in Figs. 7 and 8) and wherein a first set of rotatable shafts are configured to couple the housing module to the vehicle door and a second set of rotatable shaft sections are configured to couple the housing module to the vehicle frame (as seen in Figs. 5-8).

16. For Claim 14, '261 discloses a motor vehicle according to claim 9, except wherein the two gears each have a slotted journal which are maintained parallel to one another by the coupling mechanism module. '261 instead discloses wherein the shafts are slotted and engage the gears. Examiner takes official notice that it is old and well known to use slotted members on gears to engage a shaft and cause them to turn together (such as with a keyed shaft and gear). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have applied a keyed shaft and gear to the hinge of the motor vehicle of '261.

17. For Claim 15, '407 further discloses a hinge for a motor vehicle according to claim 9, wherein the housing module has an upper side support and a lower side support, connected together through an outer side support, together forming an interior of the housing module and also forming the open side opposite the outer side support (as seen in Figs. 1-4).

18. For Claim 16, '261 as modified by '407 discloses a motor vehicle according to claim 15 wherein the first set and the second set of rotatable shaft sections each extend through the upper side support into the interior of the housing module, and through the lower side support into the interior of the housing module, and wherein the rotatable shaft sections each comprise a tongue that projects into the interior of the housing module (as seen in Fig. 8).

19. For Claim 17, '261 as modified by '407 discloses a motor vehicle according to claim 15, wherein the first set and the second set of rotatable shaft sections each comprise an upper portion and a lower portion, with the upper portion of the first and

second rotatable shaft sections rotatably mounted in the upper side support of the housing module, and the lower portion of the first and second rotatable shaft sections rotatably mounted in the lower side support of the housing module (as seen in Figs 7-10).

20. For Claim 18, '261 as modified by '407 discloses a motor vehicle according to claim 17 wherein the upper and lower portion of the first set of rotatable shaft sections are coupled together through one of the pulleys in the coupling mechanism and wherein the upper and lower portion of the second set of rotatable shaft sections are coupled together through the other one of the pulleys in the coupling mechanism (as seen in Figs. 7-10).

21. For Claim 19, '261 discloses a motor vehicle according to claim 9 wherein the coupling mechanism module further comprises a rear panel support (29) having two longitudinal ends, the rear panel support covering at least a portion of the open side, and wherein the two gears are rotatably coupled to the two longitudinal ends of the rear panel support (as seen in Figs 7-10).

22. For Claim 20, '261 as modified by '407 discloses a motor vehicle according to claim 19 wherein the upper side support and lower side support of the housing module are substantially parallel (as seen in '407 Figs. 1-4). '261 and '407 do not teach the hinge having supports for screws to mount the coupling mechanism module, and wherein the rear support panel has openings for the screws to mount the coupling mechanism module to the housing module. Examiner takes official notice that it is old and well known to use having supports for screws to mount the coupling mechanism

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module, and wherein the rear support panel has openings for the screws to mount the coupling mechanism module to the housing module. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have applied supports for screws to the hinge housing of '261 as modified by '407 and utilized screws in connecting the housing pieces.

23. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatter (US 6,016,261) herein referred to as '261, in view of GB 2080407 herein referred to as '407, in view of Lambert (US 5,775,028) herein referred to as '028 as applied to claims 1-5 and 7-9 above and further in view of Clark et al. (US 3,782,036) herein referred to as '036.

24. For Claim 10, '261 as modified by '407, '028 and '036 teaches a method for producing a motor vehicle, in which an arm (wherein the structure of the arm is taught above in the rejections of claims 1-9 by '261 in view of '407 and '028) is connected comprising the steps of: a) fastening the door to the body of the motor vehicle by means of the housing module of the arm; b) painting the body and the door fastened thereto; and c) inserting the coupling mechanism module into the housing module (as taught by '036 in Column 9, Line 7 to Column 10, Line 2, wherein the method of first attaching a hinge member, then painting the door and body together and then mounting the door mechanisms on the inside). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the method of '036 to the hinge of '261 by applying part of the hinge member to the body and door, painting the body and door simultaneously and further attaching connection mechanisms in order to avoid painting

over the connection mechanisms which are attached after the painting of the body and door.

25. For Claim 11, '261, '028 and '036 do not teach the method according to claim 9, wherein between steps b) and c) the door is separated from the body and internal fittings are attached in the body, and wherein after attachment of the internal fittings the door and body are connected again. Examiner takes official notice that it is old and well known to reverse the steps of assembly for disassembly of a product. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have separated the door from the body in order to attach fittings and then reconnect the door to the body.

26. Examiner's assertion of official notice from the Office Action Mailed 6/25/2008 with regards to reversing the steps of assembly for disassembly of a product with regards to separating the door from the body in order to attach fittings and then reconnecting the door to the body is now taken to be admitted prior art due to Applicant's failure to traverse said official notice (see MPEP § 2144.03).

Response to Arguments

27. Applicant's arguments with respect to claims 1-5 and 7-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

28. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey O'Brien whose telephone number is (571)270-3655. The examiner can normally be reached on Monday through Friday 8:00am-5:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached on 571-272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Victor Batson/
Supervisory Patent Examiner, Art Unit 3677

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